IN THE CLAIMS:

Please amend claims as shown. As amended, the following listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A self-cleaning gas distributor capable of distributing a gas across surfaces in a substrate processing chamber, the gas distributor comprising:

(a) a hub comprising a gas inlet to receive a gas and a gas outlet comprising first and second terminus to expel the received gas;

(b) a baffle extending radially outward from the hub, the baffle having opposing first and second surfaces and comprising an outer perimeter;

(c) a plurality of spaced apart first vanes on the first surface of the baffle, the plurality of first vanes extending upwards from the first surface and configured to direct the gas expelled from the first terminus across a chamber surface, each first vane comprising an arcuate plate that curves outward from the hub to the outer perimeter of the baffle; and

(d) a plurality of second vanes on the second surface of the baffle, the plurality of second vanes comprising a plurality of inclined surfaces that are inclined to the second surface of the baffle and wherein pairs of inclined surfaces are configured to direct the gas expelled from the second terminus across a sector of the second surface of the baffle to clean the gas distributor.

2. (Canceled)

3. (Previously pending) A gas distributor according to claim 1 wherein each arcuate plate tapers from the hub to the outer perimeter of the baffle.

4. (Currently amended) A gas distributor according to claim 1 wherein the hub comprises first and second channels, and wherein the first terminus of the gas outlet comprises the terminus of the first channels, and the second terminus of the gas outlet comprises the terminus of the second channels.

5. (Currently Amended) A gas distributor according to claim 4 wherein ~~the second vanes comprise a plurality of surfaces that are inclined to the second surface of the baffle,~~ at least a portion of the inclined surfaces ~~being~~ are below the terminus of the second channels.

6. Cancel.

7. (Original) A gas distributor according to claim 1 wherein the second vanes comprise a plurality of wedges.

8. (Currently amended) A gas distributor according to claim 1 wherein the second vanes comprise inclined surfaces that are inclined to the second surface of the baffle at an angle of about 5 degrees to about 60 degrees.

9. (Currently amended) A gas distributor according to claim 1 wherein the hub comprises a gas feed-through tube capable of allowing a gas to bypass the first and second vanes and enter the chamber.

10. (Original) A combination process and cleaning gas distributor comprising the gas distributor according to claim 1 to distribute a cleaning gas, and a process gas distributor having a process gas inlet and a showerhead gas distribution faceplate.

11. (Currently amended) A self-cleaning gas distributor to distribute a gas from an external source across surfaces in a substrate processing chamber having a wall with a cavity, the gas distributor comprising:

(a) a hub that fits into the cavity in the wall of the chamber, the hub comprising (i) a plurality of first channels on an external surface of the hub that mates with the cavity, each first channel comprising an opening and a first terminus, the opening capable of receiving the gas from the external source; (ii) a plurality of second channels, each second channel capable of receiving the gas from the first terminus of the first channels and expelling the gas from a second terminus; and (iii) a gas feed-through tube;

(b) a baffle plate extending radially outward from the hub, the baffle plate comprising first and second surfaces, an outer perimeter, and an aperture capable of allowing passage of the gas along the second channels;

(c) a plurality of spaced apart first vanes on the first surface of the baffle plate, the plurality of first vanes extending upwards from the first surface and configured to direct the gas expelled from the first terminus across the surfaces of the chamber, each first vane comprising an arcuate plate that curves outward from the hub;

(d) a plurality of second vanes on the second surface of the baffle plate, the plurality of second vanes configured to direct the gas expelled from the second terminus across the second surface of the baffle plate ~~to clean the gas distributor~~, each second vane comprising [[a]] an inclined surface that is inclined to the second surface of the baffle plate and wherein adjacent pairs of inclined surfaces are configured to direct the gas across a sector of the second surface of the baffle plate to clean the gas distributor;

wherein the gas feed-through tube allows the gas to bypass the first and second set of vanes.

12. (Original) A gas distributor according to claim 11 wherein each arcuate plate tapers from the hub to the baffle plate outer perimeter.

13. (Original) A gas distributor according to claim 11 wherein at least a portion of the inclined surfaces are below the second terminus ~~aperture~~.

14. Cancel.

15. (Currently amended) A substrate processing apparatus comprising:

(a) a remote chamber to activate a gas;

(b) a process chamber comprising chamber walls, interior chamber surfaces, a substrate support, a self-cleaning gas distributor, and a gas exhaust, the gas distributor being capable of receiving the d gas from the remote chamber and distributing the gas into the process chamber, along the chamber walls and interior chamber surfaces, and about the gas distributor, the gas distributor comprising:

(i) a hub comprising a gas inlet to receive the gas, a gas outlet comprising first and second terminus to expel the received gas, and a gas feed-through tube;

(ii) a baffle extending radially outward from the hub, the baffle having opposing first and second surfaces and comprising an outer perimeter;

(iii) a plurality of spaced apart first vanes on the first surface of the baffle, the plurality of first vanes extending upwards from the first surface and configured to direct the gas expelled from the first terminus across the enclosing walls and interior chamber surfaces, each first vane comprising an arcuate plate that curves outward from the hub to the outer perimeter of the baffle; and

(iv) a plurality of second vanes on the second surface of the baffle, the ~~plurality of~~ second vanes each comprising an inclined surface that is inclined to the second surface of the baffle and wherein adjacent pairs of inclined surfaces are configured to direct the gas expelled from the second terminus across a sector of the second surface of the baffle to clean the gas distributor;

wherein the gas feed-through tube allows a gas to bypass the first and second vanes.

16. (Original) A substrate processing apparatus according to claim 15 wherein the remote chamber comprises a gas inlet, gas activator, and a gas outlet.

17. (Original) A substrate processing apparatus according to claim 15 wherein the first vanes are capable of distributing an energized cleaning gas from the remote chamber along the chamber walls and interior chamber surfaces.

18. (Original) A substrate processing apparatus according to claim 15 wherein the second vanes are capable of distributing an energized cleaning gas from the remote chamber about the gas distributor.

19. (Original) A substrate processing apparatus according to claim 15 wherein the gas feed-through tube is capable of distributing an energized process gas from the remote chamber into the process chamber.

20-21. (Canceled)